

## Receiving Report

Date: 9/05/19

Supplier: MAGNA

Packing Slip: Yes  No   
 Invoice: Yes  No   
 Receipt: Cash  Cr

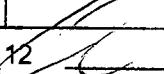
Batch No: M161787

Dart P/O: 8765

Release Note Attached: Yes  No  N/A   
 Waybill Attached: Yes  No  N/A   
 Shipment Complete: Yes  No  N/A   
 QC6 Inspection: 1  N/A   
 Work Order: 8105105  N/A

### Discrepancies

Part Number	Description	Quantity Ordered	Quantity Received	Quantity Returned	Quantity Short	Comments

Initials of receiver (if shipment OK) Level 12 

Production/Admin:

Date

Received/Costing

Initial

09/05/19  
RCP 1104  
CR

Location

SOLD TO:

DART AEROSPACE LTD  
 1270 ABERDEEN STREET  
 HAWKESBURY , ON  
 K6A 1K7

## SHIP TO:

DART AEROSPACE LTD  
 1270 ABERDEEN STREET  
 HAWKESBURY , ON  
 K6A 1K7

MTR: Y

INVOICE DATE:	05/15/09
ORDER DATE:	05/08/09
SHIP DATE:	05/15/09
ORDER NUMBER:	W012153
PURCHASE ORDER:	8765

Currency		Sales Person		Ship Via	F.O.B.		Terms
Ln	Back Ordered	Ordered	Unit	Description	Shipped	Price Per	Value
				ALUMINUM SHEET ASH 2024 T3 .063" x 48" x 144" L026418 3 PC/135 LB	3 PC	445.00	1,335.00
		222	LB	MLB 17-4 PH 1 1/4" X 2" X 144" L026417 229 LB	2 PC	575.00	1,150.00
		4	PC	STAINLESS ROUNDS SRB 303 1/2" x R/L L025707 12'2" 1 PC/8 LB L025708 12'1" 3 PC/24 LB	4 PC	26.00	104.00
		2	PC	SRB 303 5/16" x R/L L024195 12'6" 2 PC/6 LB	2 PC	10.00	20.00

RECEIVED MAY 25 2009

05/19/09 14:27:52

Merchandise:	2,609.00
Surcharges:	
No Tax Costs:	
GST	130.45
Total Due:	2,739.45

Q.S.T. # 1213236471  
 G.S.T. # 881565899 RT0001

Date May 19, 2009	Page 1
Receipt Number RCP00011047	

Dart Aerospace Ltd  
1270 Aberdeen St  
Hawksbury, Ontario K6A 1K7  
Phone: (613) 632-3336  
Fax: (613) 632-4443

## Purchase From:

Magna Stainless  
5775 rue Kieran  
St Laurent, Quebec H4S 0A3  
Canada

## Ship To:

Main Finished Goods Location  
Dart Aerospace Ltd  
1270 Aberdeen St  
Hawksbury, Ontario K6A 1K7

Reference	Description	Contact	Vendor Number	PO Number
			VC-MAG002	PO00008765

Vendor Item Number	Item Number	Description	Qty. Received	UOM	Unit Cost	Extended Cost	Arrival Date
	M303R0500	303 Round Bar 0.500" (NOTE: AISI 304/316 NOT ACCEPTABLE) MATERIAL: AISI 303 ROUND BAR B/N111787	48.0416	f	2.600000	124.91	May 19, 2009
	M303R0313	303 ROUND BAR .313 AS ABOVE B/N111787	25.0166	f	0.833333	20.85	May 19, 2009
	M2024T3S063	2024-T3 .063 sheet PER AMS-QQ-A-250/4 OR AMS 4037 MATERIAL: 2024-T3 ALUMINUM SHEET B/N111787	144.0000	sf	9.270833	1,335.00	May 19, 2009
	M174B1250X0200	17-4 SS Bar 1.250 x 2.0 MINIMUM ULTIMATE TENSILE STRENGTH = 150 KSI MINIMUM YIELD TENSILE STRENGTH = 100 KSI GRAIN MUST RUN ALONG LENGTH OF BAR PER AMS 5604/5643 MATERIAL: 17-4 PH SS BAR B/N111787	24.0000	f	47.916666	1,150.00	May 19, 2009

Comments:

I011250

Page: 1 of 1

 SOLD TO:  
**DART AEROSPACE LTD**  
 1270 ABERDEEN STREET

 HAWKESBURY, ON  
 K6A 1K7  
 Contact: CHANTAL

 SHIP TO:  
**DART AEROSPACE LTD**  
 1270 ABERDEEN STREET

 HAWKESBURY, ON  
 K6A 1K7  
 Ship Terms: PREPAID

MTR: Y

SPECIAL INSTRUCTIONS

Currency	Sales Person	Customer Phone	Customer Fax	Customer PO		
Sales Order	Terms	Ship Via	Date Ordered	Date Required	Date Shipped	
CANADIAN DOLLARS	ERYCK BLAIS	(613) 632-5200	(613) 632-1053	8765		
W012153	NET 30 DAYS	NIR:R-557065-1	05/08/09	05/15/09	05/15/09	

Ordered	Back Ordered	Unit	Description	Bundle #	Heat #	Shipped
3		PC	ALUMINUM SHEET ASH 2024 T3 .063" x 48" x 144" 135 LB / 3 PC	L026418	459844A7	3
222		LB	MLB 17-4 PH 1 1/4" X 2" X 144" 229 LB / 2 PC	L026417	421806	229
4		PC	STAINLESS ROUNDS SRB 303 1/2" x R/L 12'2" 8 LB / 1 PC 12'1" 24 LB / 3 PC	L025707 L025708	421337 422802	1 3
2		PC	SRB 303 5/16" x R/L 12'6" 6 LB / 2 PC	L024195	422176	2
Bundles: 2 & Shipped with 12151				Total	Weight:	402 LB

Received by:

Date:

Signature:

402 LB

ca/09/09

**DART**

## Purchase Order

Date	Page
May 08, 2009	1
<b>Purchase Order Number</b>	
PO00008765	

Dart Aerospace Ltd  
1270 Aberdeen St  
Hawkesbury, Ontario K6A 1K7  
Phone: (613)632-9577  
Fax: (613)632-1053

**FAXED**  
6/69/05/01

**Vendor Address:**

**Magna Stainless**  
5775 rue Kieran  
St Laurent, Quebec H4S 0A3  
Canada  
Phone (514) 339-1211  
Fax (514) 339-1105

Ship To

Main Street Foods Location  
Dairy Space Ltd  
1270 Aberdeen St  
Hawthorne, Ontario K6A 1K7

Reference	Contact	Vendor Number	PO Date	Terms	Ship Via	Expected Arrival
		VC-MAG002	May 08, 2009	N30	yours	May 13, 2009

MATERIAL CERTIFICATION  
REQ'D UPON DELIVERY

Comments:	Tax Summary:	130.45	Less: included tax	0.00
	GST			
	ONTPST			2,609.00
				130.45
Entered By: <i>CL</i>	CLAVOIE		Total purchase order in	
Approved By: <i>h</i>		CAD Dollars		2,739.45

# Acciaierie Valbruna S.p.A.



## CERTIFICATO DI COLLAUDO ABNAHMEPRUEFZEUGNIS INSPECTION CERTIFICATE CERTIFICAT DE RECEPTION EN 10204 (2005), 3.1

36100 VICENZA (Italia) - Viale della scienza, 25 z.i.

Slab.: 39100 BOLZANO (Italia) - Vla. A. Volta, 4

Cliente / Bestellvor/Purchaser/Client  
VALBRUNA CANADA LTD  
8724 HOLGATE CRESCENT  
CDN-MILTON, ONT L5T 5Z1-CAN

Produttore: ACCIAIERIE VALBRUNA S.p.A.  
Herrsteller/Usine productrice

Avviso di Spedizione: D-VI08023633  
Lieferzeige/Packing list/B.L.

Certificato nr: MEST668292/2008/  
Prüfung/Test/Essai

Conferma ordine nr: EI08003212  
Werks-Our Order/Ref nr.

Marchio di Fabbrica:  
Zichen des Lieferwerkes  
Trade mark  
Saglo de l'usine productrice



Punzone del Collaudatore:  
Stampo des Werkssachverständigen  
Inspector's stamp/Pointe de l'assayeur



Oggetto Prove: - Annealed Cold Drawn  
Prüfgegenstand/Item Inspected/Objet

Tipo di Elaborazione: E+AOD  
Eischmelzungs/Annealing process/Mode d'élaboration

Specifiche:  
Anforderungen / Requirements / Exigences

VAL CANADA 2 303 A,CF  
ASTM A314 97 S30300  
DOD-F-24669 6 S30300  
(0) SEC.II PT.A 2007 EDITION

AMS 5640 U TYPE1  
ASTM A320 2008 B8F  
MIL-S-862 B/1 303

ASME SA320 2007 BBF (0)  
ASTM A582 2005 S30300  
QQ-S-764 B/2 303

Qualità: T-303  
Werksnr/Grade/Numéro

Marca: VPAU188Z VALPLUS  
Markenbezeichnung/Brand/Numéro

Pos. nr.  
Pos. nr.  
Num. de poste

Oggetto  
Gegenstand  
Produit

Dimensioni - In  
Abmessungen  
Dimensions  
Dimension

Tolleranza  
Toleranz  
Allowance  
Tolérance

Lunghezza - Ft  
Länge  
Longueur

Colata  
Schmelze  
Fonte  
Coulée

Pezzi  
Stückzhl  
Pièces  
Pieces

Peso - LB  
Gewich  
Poids  
Poids

Lotto nr.  
Losenr.  
Lot nr.  
Lot nr.

0010 Round 0,3125 484-06B

13 / 13

422176

17.320

810205730

Punzonatura: T-303

Kennzeichnung/Marking/Marquage

Controllo visivo e dimensionale: soddisfa le esigenze:

Beobachtung und Ausmessung; ohne Beamung

Visual inspection and dimensional check; satisfactory

Contrôle visuel et dimensionnel: satisfaisant

Sono state soddisfatte tutte le condizioni richieste

Die gestellten Anforderungen sind erfüllt. Anhänger erfüllt.

The material has been furnished in accordance with the requirements.

Le matériel a été fourni conformément aux exigences.

Controllo antimescolanza: OK

Vorverdichtungsprüfung; spectralanalytisch (kurchgößt)

Antimix testing performed: OK

Controle antimixtage fall: r.o.s.

TEST	Provetta/Probette Sperrkörper/Probenkörper Längsdicke Spalt Durchmesser Wech. Dicke Thickness Läng. diam. epais. mm	°F Posiz. Stellung Position Position *)	Snervamento Streckgrenze Yield Stress Limite élastique Rp 0,2% k.s.i.	Snervamento Streckgrenze Yield Stress Limite élastique	Resistenza Zugspannung Tensile strength Résistance à traction Rm k.s.i.	Allungamento Biechstreckung Biegung Allongement	Strizione Einschränkung Reduction of area Section	Resilienza Körperhärte/Bruch Impact Value Resistance	Durezza Härte Härte Dureté HB
Valori richiesti 1 Anforderungen Required values Valeurs demandées	min max	30	-	75	-	35	-	50	-
A 7,93	68 L	87	-	114	-	38	-	53	140 241 239

1) L=longitudinale/längs. O=transversale/quer. T=Tangenziale/tangential

### Analisi chimica

Chemische Zusammensetzung/Chemical Analysis/Analyse chimique

Colata /real Schmelze/Coulée	min - max 0,150	1,00	2,00	17,00 19,00	0,60	1,00	8,00 10,00	0,15	0,15 0,40	-	-	-
	C %	Si %	Mn %	Cr %	Mo %	Cu %	Ni %	Co %	P %	S %		
422176	0,045	0,39	1,85	17,39	0,47	0,59	8,05	0,067	0,03	0,30		

Produced without class I-II Ozone depleting substances.

Solution heat treated free from continuous carbide network.

Annealing temperature: 1940°F for 0,5 h/water.

Micro and macro etch test: OK

Material is DFARS Compliant

Melted and manufactured in Italy No welding or weld repair Material free from Mercury or radio-activity contamination

The Quality Management System is Certified acc. Pressure Equipment Directive (97/23/EC) Annex I.s.4.3 by TUEV and LLOYD'S

# Acciaierie Valbruna s.p.a.



36100 VICENZA (Italia) - Viale della scienza, 25 z.l.  
Stab.: 39100 BOLZANO (Italia) - Via A. Volta, 4

Cliente / Besteller/Purchaser/Client  
VALBRUNA CANADA LTD  
8724 HOLGATE CRESCENT  
CDN-MILTON, ONT L5T 5Z1-CAN

Produttore: ACCIAIERIE VALBRUNA S.P.A.  
Hersteller/Italien/Usine producere

Oggetto Prove: - Annealed Cold Drawn  
Prüfgegenstand/Item Inspected/Finissage

Avviso di Spedizione: D-VI08033249  
Lieferant/Teque/Packing list/B.L.

Ordine nr: B12002092 Stock - Canada  
Bestell/Vour order/Commando

Tipo di Elaborazione: E+AOD  
Eischmelzungsart/Melting process/Mode d'elaboration

## CERTIFICATO DI COLLAUDO ABNAHMEPRUEFZEUGNIS INSPECTION CERTIFICATE CERTIFICAT DE RECEPTION EN 10204 (2005), 3.1

Certificato nr: MEST703352/2008/  
Prüfung/Test/Essai

Conferma ordine nr: EI08012249  
Works/Our Order/Réf. nr.

Marchio di Fabbrica:  
Zeichen des Lieferwerkes  
Trade mark  
Sigle de l'usine producere



Punzone del Collaudatore:  
Stempel des Werkssachverständigen  
Inspector's stamp/Portion de l'assayeur



Specifiche:  
Anforderungen / Requirements / Exigencias.

VSI 0 303 HS A,CF  
ASME SA320 2007 B8F 0  
ASTM A370 2008A  
QQ-S-764 B/2 303 A  
(0) SEC.II PT.A 2007 EDITION  
(1) Chemical analysis only.

AMS 5640 U S30300 A  
ASTM A314 97 S30300  
ASTM A582 2005 S30300 A

AMS 5640 U TYPE1 A  
ASTM A320 2008 B8F (1)  
MIL-S-862 B/1 303

0Chemical analysis only.

Qualità: T-303  
Werksat/Grade/Nuance

Marca: MV188ZHS MAXIVAL

Markenbezeichnung/Brand/Nuance

Punzonatura: 303  
Kennzeichnung/Marking/Marquage

Pos. nr. Pos. nr. Nr. de poste	Oggetto Gegenstand Product description Objet du produit	Dimensioni - In Abmessungen Dimensions Dimensions	Tolleranza Toleranz. Allowance Tolerance	Lunghezza - In Länge Length Longueur	Colata Schmelze Heat Coulée	Pezzi Stückzahl Pieces Piezas	Peso - LB Gewicht Weight Poids	Lotto nr. Losnr. Lott. Lot nr.
0020	Round	0,5000	484-06B	146 / 146	421337		2.134	820500030

Sono state soddisfatte tutte le condizioni richieste

Die gestellten Anforderungen sind lt. Anlage erfüllt  
The material has been furnished in accordance with the requirements  
Le matériau a été trouvé conforme aux exigences

Controllo antimescolanza: OK  
Verwechslungsprüfung: spectralanalytisch durchgeführt  
Antimixing testing performed: OK  
Contrôle antimélange fait: r.a.s.

Controllo visivo e dimensionale: soddisfa le esigenze:  
Besichtigung und Ausmessung: ohne Beanstandung  
Visual inspection and dimensional checks: satisfactory  
Contrôle visuel et dimensions: satisfaisant

TEST	Provetta/probestück Spalt/Spalt Long diam. Spalt Breadth Diam. Dicke Width Diam. Thickness Long diam. epais mm	°F Posiz. Saggio Position Testing Position	Snervamento Strengung Vice Stress Unter Spannung Rp 0,2% k.s.i.	Snervamento Strengung Vice Stress Unter Spannung	Resistenza Zugfestigkeit Tensile strength Resistance à traction	Allungamento Biegeschwingung Elongation Allongement	Strizione Einschränkung Reduction of the Section	Resilienza Kreuzschlagarbeit Impact Value Resilience	Durezza Härte Härte Durez HB
Valori richiesti 1 Anforderungen/Required values Valours demandés	min max	-	-	-	-	-	-	-	140 255
A 12,5	68	L	88		115		31	52	253

Grain size for ASTM E112 : 6

t.l.=longitudinale/baue, T=trasversale/quer, Q=Tangenziale/tangential

### Analisi chimica

Chemische Zusammensetzung/Chemical Analysis/Analyse chimique

Colata /Heat Schmelze/Coulée	min 0,030 max 0,050	0,20 1,00	1,50 2,00	17,00 19,00	- 0,60	1,00 8,00	10,00 - - 0,100	0,32 0,40 0,4000	- - - -	- - - -	
421337	C % 0,035	Si % 0,44	Mn % 1,90	Cr % 17,44	Mo % 0,43	Cu % 0,55	Ni % 8,21	Co % 0,08	P % 0,024	S % 0,34	Zr % 0,0039

Produced without class I-II Ozone depleting substances.

Solution heat treated free from continuous carbide network.

Annealing temperature: 1940°F for 0.5 h/water.

Micro and macro etch test: OK

Material is DFARS Compliant

Melted and manufactured in Italy No welding or weld repair Material free from Mercury or radio-activity contamination  
The Quality Management System is Certified acc. Pressure Equipment Directive (97/23/EC) Annex 1,s.,4.3 by TUEV and LLOYD'S

Vicenza, 12/12/08  
VCO008  
(Mod. MCER)

Il collaudatore di stabilimento / der Werkssachverständige / Works Inspector / L'agent d'usine  
M.Rizzoli/R. Rizzoli

Pagina - 1 di 1

# Acciaierie Valbruna S.p.A.



36100 VICENZA (Italia) - Viale della scienza, 25 z.i.  
Slab.: 39100 BOLZANO (Italia) - Via A. Volta, 4

Client / Besteller/Purchaser/Client  
VALBRUNA CANADA LTD  
8724 HOLGATE CRESCENT  
CDN-MILTON, ONT L5T 5Z1-CAN

Produttore: ACCIAIERIE VALBRUNA S.P.A.  
Horstföhrer/Item/Usine productrice

Oggetto Prove: - Annealed Cold Drawn  
Prüfgegenstand/Item Inspected/Finesage

Avviso di Spedizione: D-VI08033249  
Lieferanzeige/Packing list/B.L.

Ordine nr: 812002092 Stock - Canada  
Batch/Your order/Commande

Tipo di Elaborazione: E+AOD  
Eisenhüttenungs/Melting process/Mode d'élaboration

## CERTIFICATO DI COLLAUDO ABNAHMEPRUEFZEUGNIS INSPECTION CERTIFICATE CERTIFICAT DE RECEPTION EN 10204 (2005), 3.1

Certificato nr: MEST703353/2008/  
Prüfung/Test/Essai

Conferma ordine nr: EI08012249  
Works/Our Order/Ref nr.

Marchio di Fabbrica:  
Zeichen des Lieferwerkes  
Trade mark  
Signe de l'usine productrice



Punzone del Collaudatore:  
Stempel des Werkssachverständigen  
Inspector's stamp/Pointe de l'assayeur



Specifiche:  
Anforderungen / Requirements / Exigences:  
VSI 0 303 HS A,CF  
ASME SA320 2007 B8F 0  
ASTM A370 2008A  
QQ-S-764 B/2 303 A  
(0) SEC.II PT.A 2007 EDITION  
(1) Chemical analysis only.

AMS 5640 U S30300 A  
ASTM A314 97 S30300  
ASTM A582 2005 S30300 A

AMS 5640 U TYPE1 A  
ASTM A320 2008 B8F (1)  
MIL-S-862 B/1 303

0Chemical analysis only.

Qualità: T-303  
Works/Grade/Nuance

Marca: MV188ZHS MAXIVAL

Markenbezeichnung/Brand/Numéro

Pos. nr. Pos. nr. Item nr. Nr. de poste	Oggetto Gegenstand Produkt description Descripción del producto	Dimensioni - In Abmessungen Dimension Dimension	Tolleranza Toleranz Allowance Tolerance	Lunghezza - In Länge Length Longueur	Colata Schmelze Heat Coulée	Pezzi Stückzahl Pieces Pièces	Peso - LB Gewicht Weight Poids	Lotto nr. Lotnr. Lot nr. Lot nr.
0020	Round	0,5000	484-06B	145 / 145	422802		2.383	826900790

Sono state soddisfatte tutte le condizioni richieste  
Die gestellten Anforderungen sind erfüllt.  
The material has been furnished in accordance with the requirements  
Le matériel a été trouvé conforme aux exigences

Controllo antimescolanza: OK  
Wechselnumprüfung: spektroanalytisch durchgeführt  
Antimizing testing performed: OK  
Contrôle antimélanges fait: r.a.s.

Controllo visivo e dimensionale: soddisfa le esigenze:  
Besichtigung und Ausmessung: ohne Beschränkung  
Visual inspection and dimensional check: satisfactory  
Contrôle visuel et dimensions: satisfaisant

TEST	Provetta/Probenst Specimen/Échantillon Larg. diam. Spec Bruc. Elen. Dicke Wand Diam. Thickness Larg. diam. spalt mm	°F Posiz. Soglio Position Serraggio Position " "	Serramento Serraggio Yield Stress Limite elastico Rp 0,2% k.s.i.	Serramento Serraggio Yield Stress Limite elastico Rp 0,2% k.s.i.	Resistenza Zugfestigkeit Tensile Strength Rm k.s.i.	Allungamento Rückprängelung Elongation Allungamento	E 4d %	Strizione Erschütterung Reduction of area Schröpfen RA %	Resilienza Kerb/Höglast Impact Value Resilience	Durezza Härte Hardness Dureté HB
Valori richiesti 1 Anforderungen/Required values Valeurs demandées	min max		-	-	-	-	-	-	-	140 255
A 12,5	68	L	78		108		38		53	252

1) L=longitudinale/ längs. T=trasversale/quer. Q=Tangenziale/tangential

Grain size for ASTM E112 : 5

### Analisi chimica

Chemische Zusammensetzung/Chemical Analysis/Analyse chimique

Colata /Heat Schmelze/Coulée	min 0,030 max 0,050	0,20 1,00	1,50 2,00	17,00 19,00	0,60 1,00	8,00 10,00	- -	0,100 0,100	0,32 0,40	0,4000 0,4000	- -	- -	
422802	C % 0,042	Si % 0,44	Mn % 1,81	Cr % 17,42	Mo % 0,41	Cu % 0,63	Ni % 8,20	Co % 0,09	P % 0,027	S % 0,34	Zr % 0,0044		

Produced without class I-II Ozone depleting substances.

Solution heat treated free from continuous carbide network.

Annealing temperature: 1940 °F for 0.5 h/water.

Micro and macro etch test: OK

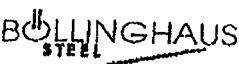
Material is DFARS Compliant

Melted and manufactured in Italy No welding or weld repair Material free from Mercury or radio-activity contamination  
The Quality Management System is Certified acc. Pressure Equipment Directive (97/23/EC) Annex 1.s..4.3 by TUEV and LLOYD'S

Vicenza, 12/12/08  
VC0008  
(Mod. MCER)

Il collaudatore di stabilimento / der Werkssachverständige / Works inspector / L'agent d'usine  
M. Rizzotto

Pagina - 1 di 1

		Abnahmeprüfungsnachweis / Our Int. Ref. N/ ref int <b>EN 10204:2004/931</b> Certif. de Qualidade <b>N 000006/N29</b>	
Böllinghaus Portugal Aços Especiais, SA DIN EN ISO 9001:2000 TÜV CERT No. 01 100 030458		Unsere innere Verweisung / Our Int. Ref. N/ ref int <b>5600009812 000120</b>   Datum / Date / Data <b>23.10.2008</b>	
AISI 630/17-4PH, lot. acc. to ASTM A484/A484M-08-b, specifications acc. to: ASTM A370-05, A564/A564M-04, E370, AMS 5643R, ASME SA 370, SA 564, ASTM F899-02, MTR acc. to EN 10204/3.1 <b>Normen / Standards / Normas</b>			
<b>Kunde / Customer / Cliente</b>  Bestell Nr./Order Nr./Enc.Nr. <b>P80610AM001</b>		<b>Endgültiger Kunde / Final Customer / Cliente Final</b>  Bestell Nr./Order Nr./Enc.Nr. <b>P80610AM.16</b>	
<b>Prüfgegenstand / Product / Produto</b> <b>AISI T630 FLAT 2 x 1 1/4"</b>		<b>Gewicht / Weight / Peso</b> <b>4,326 lb</b>	<b>Bunde / Bundle / Atados</b> <b>02</b>
Werkstoff-Nr. Material-no. Qualität <b>1.4542</b>		Werkstoff-Normbezeichnung / Material standard grade / Norma do material <b>830</b>	
Beschreibung / Description / Descrição Stainless steel flat bars, hot rolled, solution annealed, straightened, pickled. US DFAR 252.225-7014: MELT SOURCE: Germany / MFG: Portugal.			
 <b>OCT 28 2008</b>			
Schmelzen Nr. Cast nr. / Fuso nr. <b>421806</b>			
 <b>PC</b> <b>RYALMCDONALD, CERTIFICATION PROCESSOR</b>			
Chemische Analyse in % / Chemical composition in % / Análise química em % C: 0.026 Si: 0.400 Mn: 0.640 P: 0.021 S: 0.001 Cr: 15.040 Ni: 4.590 EAF Mo: 0.080 Co: 0.030 Cu: 3.030 N: 0.023 Ti: 0.001 Nb: 0.241 Ta: 0.000			
<b>ASTM E399</b> Proben Nr. Test no. Amostra no <b>3Q16607.01.01</b>			
<b>ASTM A370</b> Kurbelwinkelarbeit Impact Test Resistência (Charpy V) <b>180,6</b>			
Bruchgrenze Yield point Tensão límite Rp 0.2% [Ksi] <b>180,6</b>			
Dehngrenze 1% point Limite de extensão Rp 1.0% [Ksi] <b>194,6</b>			
Zugfestigkeit Tensile strength Tensão de rotura Rp [Ksi] <b>207,8</b>			
Dehnung Elongation Alongamento A (A50-50mm) <b>15%</b>			
Einschmelzung Reduction of area Coel. Estrição Z (A50-50mm) <b>51%</b>			
<b>ASTM E370</b> Visualis Kontrolle Visual inspection Inspeção visual <b>OK</b>			
Härte Hardness Dureza <b>308</b> [HB]			
Korrosionsbeständigkeit IC Test Corrosão intercristalina <b>OK</b>			
Wärmebehandlung Heat treatment Tratamento térmico <b>OK</b>			
Solution Annealed 1900 °F (6 hrs) Alterungsbearbeitung Aging Treatment <b>OK</b>			
Verwechslungsprüfung Test of Identity Teste de identificação <b>OK</b>			
Makroskopische Untersuchung Microstructure Analysis approved per AMS 2316 <b>OK</b>			
Makroskopische Untersuchung Macrostructure Analysis <b>OK</b>			
Material free from segregation defects. <b>OK</b>			
<b>Bemerkungen / Remarks / Observações</b> Material is free of mercury contamination, no weld repair done.			
<b>Böllinghaus Portugal - Aços Especiais, SA</b> Hiermit bestätigen wir, dass das Material der oben genannten Spezifikation entspricht. We confirm that this material meets the specification according the mentioned according the mentioned standards. Confirmamos que este material respeita as especificações de acordo com as normas referidas.			
FR-03.02.05/1			

SHIP TO:			
SOLD TO:			

**KAISER**  
**ALUMINUM**  
Trentwood Works - Spokane, WA 99215  
Phone: (800) 367-2586

## CERTIFIED TEST REPORT

Serial Number  
4156331

CUSTOMER PO NUMBER:		WORK PACKAGE:	CUSTOMER PART NUMBER:		SHIP RUN/LOAD ID:	GOV'T CONTRACT NUMBER:
P90126DK005					101485/12	
KAISER ORDER NO:	LINE ITEM:	SHIP DATE:	ALLOY:	CLAD:	TEMPER:	PRODUCT DESCRIPTION:
1080194	6	2-MAR-2009	2024	BARE	T3	MILL FINISH SHEET
WEIGHT SHIPPED:	QUANTITY:	B/L NUMBER:	GAUGE:	WIDTH:	LENGTH:	
3316 LB	74 PCS EST.	2021716	0.0630 IN	48.000 IN	144.000 IN	

### Certified Specifications

AMS 4037/RevN  
CMMMP 019/RevD

AMS-QQ-A-250/4/RevA  
CMMMP 025/RevR

ASTM B 209/Rev07

Test Code: 1504

### Test Results

Lot: 459844A7 Cast 453

Drop 22

Ingot 2

(ASTM E8/B567)

Tensile:	Temper	Dir / # Tests	Ultimate KSI (MPA)	Yield KSI (MPA)	Elongation %
	T3	LT / 2 (Min:Max)	65.3 : 66.0 (450 : 455)	43.5 : 44.0 (300 : 303)	19.7 : 22.4

(ASTM E1251)

Chemistry:	Si	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER	
Actual	0.08	0.23	4.6	0.53	1.3	0.01	0.18	0.01	0.01	0.01	TOT	0.03

### ALLOY LIMITS

Chemistry:	Si	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER	MAX
2024 MIN	0.00	0.00	3.8	0.30	1.2	0.00	0.00	0.00	0.00	0.00	EACH	0.05
MAX	0.50	0.50	4.9	0.9	1.8	0.10	0.25	0.15	0.05	0.05	TOT	0.15

Aluminum Remainder

### TEST NOTES

2024-T351 plate 3.001-4.000" thick, if ultrasonically  
inspected, meets requirements of CMMMP025 per SDR  
CMMMP025-KaiserT-2.



Trentwood Works - Spokane, WA 99215  
Phone: (800) 367-2586

## CERTIFIED TEST REPORT

Serial Number  
4156331

### CERTIFICATION

KAISER ALUMINUM FABRICATED PRODUCTS, LLC (KAISER) HEREBY CERTIFIES THAT METAL SHIPPED UNDER THIS ORDER WAS MELTED IN THE UNITED STATES OF AMERICA OR A QUALIFYING COUNTRY PER DFARS 225.872-1(a), WAS MANUFACTURED IN THE UNITED STATES OF AMERICA, AND MEETS THE REQUIREMENTS OF DFARS 252.225 FOR DOMESTIC CONTENT. THIS MATERIAL HAS BEEN INSPECTED, TESTED, AND FOUND IN CONFORMANCE WITH THE REQUIREMENTS OF THE APPLICABLE SPECIFICATIONS AS INDICATED HEREIN. ALL METAL WHICH IS SOLUTION HEAT TREATED COMPLIES WITH AMS 2772. ANY WARRANTY IS LIMITED TO THAT SHOWN ON KAISER'S STANDARD GENERAL TERMS AND CONDITIONS OF SALE. TEST REPORTS SHALL NOT BE REPRODUCED EXCEPT IN FULL, WITHOUT THE WRITTEN APPROVAL OF KAISER ALUMINUM FABRICATED PRODUCTS, LLC LABORATORY. THE RECORDING OF FALSE, FICTITIOUS, OR FRAUDULENT STATEMENTS OR ENTRIES ON THE CERTIFICATE MAY BE PUNISHED AS A FELONY UNDER FEDERAL LAW. ISO-9001:2000 CERTIFIED.

BILL POYNOR, LABORATORIES SUPERVISOR

Page 2 of 2

Date : Friday, 08/05/2009 6:59:45 AM

User : Chantal Lavoie

AUTO PO REQUIREMENTS LIST

Job /SO Number	Seqn	Item	Supplier	Qty	Price	Date Required	Lead	Make	
	0.0	18200	VU-VIV001	1.00000000	0.0000	19/06/2009	0	N	
	0.0	825 221	VC-HAS001	50.00000000	3.0793	19/06/2009	1	N	
	0.0	93695K88	VU-MCM001	50.00000000	0.2318	19/06/2009	1	N	
	0.0	AELS103213Q	VU-MMA001	10.00000000	0.0000	19/06/2009	0	N	
	0.0	AN417A	VU-AIR002	1000.00000000	0.0000	19/06/2009	0	N	
	0.0	AN5261032R9	VU-BIL001	100.00000000	200	0.0000	19/06/2009	0	N
	0.0	CHM10601	VU-MMA001	50.00000000	0.0000	19/06/2009	0	N	
	0.0	CP72530	VU-MCM001	20.00000000	0.0000	19/06/2009	0	N	
	0.0	D25761	VC-ALP001	100.00000000	0.0000	19/06/2009	0	N	
	0.0	D26005108	VC-BON001	240.00000000	0.0000	19/06/2009	0	N	
	0.0	D26007125	VC-IND006	104.00000000	0.0000	19/06/2009	0	N	
	0.0	D2986	VC-ACR001	23.60400000	3.3525	19/06/2009	1	N	
	0.0	D31881	VC-DEL002	4.00000000	0.0000	19/06/2009	0	N	
	0.0	D32552	VC-IND004	4.00000000	0.0000	19/06/2009	0	N	
	0.0	D33091	VC-STU001	10.00000000	0.0000	19/06/2009	0	N	
	0.0	D33093	VC-STU001	8.00000000	0.0000	19/06/2009	0	N	
	0.0	D33301	VC-IND004	4.00000000	0.0000	19/06/2009	0	N	
	0.0	D33302	VC-IND004	4.00000000	0.0000	19/06/2009	0	N	
	0.0	D33303	VC-IND004	4.00000000	0.0000	19/06/2009	0	N	
	0.0	D33305	VC-IND004	4.00000000	0.0000	19/06/2009	0	N	
	0.0	D33307	VC-IND004	4.00000000	0.0000	19/06/2009	0	N	
	0.0	D36191T1	VU-MCM001	4.00000000	0.0000	19/06/2009	0	N	
	0.0	D3781041	VU-MMA001	1.00000000	0.0000	19/06/2009	0	N	
	0.0	D38821130	VC-BON001	63.00000000	0.0000	19/06/2009	0	N	
	0.0	D38821130P	VC-BON001	10.00000000	44.9800	19/06/2009	1	N	
	0.0	M1010B0750X02500	VC-CAM002	4.00000000	5.9000	19/06/2009	1	N	
	0.0	M1010B1500X01000	VC-CAM002	22.35850000	4.9000	19/06/2009	1	N	
	0.0	M1010B2500X01000	VC-CAM002	4.00000000	8.5000	19/06/2009	1	N	
	0.0	M1010B4000X00500	VC-CAM002	21.95260000	5.8400	19/06/2009	1	N	
	0.0	M1010S125	VC-CAM002	6.38570000	4.0500	19/06/2009	1	N	
	0.0	M1020TR2000W500	VC-CAM002	4.00000000	10.2500	19/06/2009	1	N	
	0.0	M174B1250X02000	VC-COP001	24.00000000	35.0000	19/06/2009	1	N	
	0.0	M174B1500X02250	VC-COP001	20.00000000	46.8200	19/06/2009	1	N	
	0.0	M174PHH900B393	VC-MAG002	10.00000000	479.0000	19/06/2009	1	N	

Date : Friday, 08/05/2009 6:59:45 AM

User : Chantal Lavoie

AUTO PO REQUIREMENTS LIST

Job /SO Number	Seqn	Item	Supplier	Qty	Price	Date Required	Lead	Make
7X4750								
	0.0	M2024T3S063	VC-CAM002	96.00000000	144	14.1500	19/06/2009	1 N
	0.0	M303R0313	VC-COP001	4.00000000	20	0.0000	19/06/2009	0 N
	0.0	M303R0500	VC-COP001	20.00000000	40	3.2000	19/06/2009	1 N
	0.0	M4130NR1250	VC-CAM002	4.00000000	16.5500	19/06/2009	1 N	
	0.0	M5052H32S020	VC-CAM002	32.00000000	0.0000	19/06/2009	0 N	
	0.0	M6061T6R0875	VC-CAM002	6.00000000	0.0000	19/06/2009	0 N	
	0.0	M6061T6R1125	VC-CAM002	6.00000000	0.0000	19/06/2009	0 N	
	0.0	M6061T6T03125W	VC-COP001	40.00000000	1.7500	19/06/2009	1 N	
		058						
	0.0	M6061T6T0500W0	VC-COP001	200.00000000	0.0000	19/06/2009	0 N	
		58						
	0.0	MLEXS125	VC-GEP001	64.00000000	2.8500	19/06/2009	1 N	
	0.0	MS21042L4	VC-AVI001	6000.00000000	0.2000	19/06/2009	1 N	
	0.0	MS210433	VC-AVI001	15.00000000	100	1.5800	19/06/2009	1 N
	0.0	MS24694S100	VC-AVI001	35.00000000	100	0.0000	19/06/2009	0 N
	0.0	NAS43DD446	VC-AVI001	3.00000000	0.0000	19/06/2009	0 N	

## Chantal Lavoie

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**From:** Eryck Blais [eblais@magnastainless.com]  
**Sent:** May 5, 2009 3:37 PM  
**To:** 'Chantal Lavoie'  
**Subject:** RE: quote

THANK YOU  
ERYCK

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**From:** Chantal Lavoie [mailto:clavoie@dartaero.com]  
**Sent:** Tuesday, May 05, 2009 11:18 AM  
**To:** Eryck Blais  
**Subject:** quote

Please advise price & delivery on material.  
17-4 bar 1.250" x 2" x 24 ft 2 PCS 575.00 EACH 1 WEEK 47.9166666 ✓  
17-4 bar 1.5" x 2.250" x 24 ft OFFER 1 1/2" X 2 1/2" 2 PCS 750.00 EACH 1 WEEK  
303 round bar .500" x 40 ft 4 PCS 26.00 S TOCK ✓  
4130N round bar 1.250" x 12 ft 1 PC 425.00 EACH DELAY 1 WEEK

Thanks  
Chantal

**Chantal Lavoie**

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**From:** Eryck Blais [eblais@magnastainless.com]  
**Sent:** May 7, 2009 1:35 PM  
**To:** 'Chantal Lavoie'  
**Subject:** RE: quote

THANK YOU  
ERYCK

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**From:** Chantal Lavoie [mailto:clavoie@dartaero.com]  
**Sent:** Thursday, May 07, 2009 10:29 AM  
**To:** Eryck Blais  
**Subject:** quote

Please advise price & delivery on material.  
2024-t3 sheet .063 x 128 sf 3 PCS 445.00 EACH   
303 round bar .313 x 24 ft 2 PCS 10.00 EACH  
~~5052h32 sheet .020" x 32 sf WE START AT .032 AND UP~~  
Thanks  
Chantal